



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/945,552	09/02/2001	Anton Fritzer	GS 0446 A US	1850

7590 09/26/2003

Alfred J. Mangels  
4729 Cornell Road  
Cincinnati, OH 45241-2433

EXAMINER

HO, HA DINH

ART UNIT

PAPER NUMBER

3681

DATE MAILED: 09/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/945,552

Applicant(s)

FRITZER ET AL.

Examiner

Ha D. Ho

Art Unit

3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2003 and 03 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 83-153 is/are pending in the application.
- 4a) Of the above claim(s) 115, 117, 118, 121-126, 129-131, 137, 142 and 144 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 83, 89-93, 95-102, 104, 116, 135, 136, 138-141 and 147-153 is/are rejected.
- 7) ☒ Claim(s) 84-88, 94, 103, 105-114, 119, 120, 127, 128, 132-134, 143, 145 and 146 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 25 March 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This Office Action is responsive to Applicant's Amendment filed on 3/25/03. Claim 1 has been amended, and new claims 4 and 5 have been added accordingly. Claims 83-153 are currently pending.

#### ***Election/Restrictions***

2. Applicant's election with traverse of Species 3, Fig. 3 in Paper No. 11 is acknowledged. The traversal is on the ground(s) that all the claims should be considered together and in a single application as it is believed that claim 1 is generic. This is not found persuasive because some of the dependent claims are claiming the features of the non-elected species. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

The requirement is still deemed proper and is therefore made FINAL.

3. Claims 115, 117, 118, 121-126, 129-131, 137, 142, 144 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 11. Note that Examiner withdrew claims 117, 129 and 131 from further consideration since they are dependents from claim 115, which is not elected by applicant.

***Claim Objections***

4. Claims 88, 140 and 151 are objected to because of the following informalities:

Claim 88, line 2, --be-- should be inserted after “to”.

Claim 140, line 2, “in a” should be changed to --in the --.

Claim 151, line 4, “of a” should be changed to --of the --.

Appropriate correction is required.

5. Upon allowance, the following claims should be amended as follows:

Claim 117, line 3, --the-- should be inserted after “outward of”.

Claim 118, line 3, --the-- should be inserted after “inward of”.

Claim 130, line 3, “a track” should be changed to --the track--.

Claim 130, line 3, “a first freewheel” should be changed to --the first freewheel --.

Claim 130, line 4, “a track” should be changed to --the track--.

Claim 130, line 4, “a second freewheel” should be changed to --the second freewheel --.

Claim 137, lines 3-4 and line 6, “an internal combustion engine” should be changed to --  
the power source --.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 91-95, 98 and 99 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not

Art Unit: 3681

described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 91 recites "planet gears that engage the sun gear and the planet gears". It appears that recitation should be --planet gears that engage the sun gear and the ring gear-- because the planet gears could not engage the sun gear and themselves.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 92, 116, 135, 136, 138, 139 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 92, 135, 136 recite the limitation of "an internal combustion engine" which appears to constitute a double inclusion since "a power source" was previously recited in claim 1, line 3. It is unclear as to if the "internal combustion engine" is the "power source".

Claim 116 recites the limitation "the transmitting body" in line 2. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for

Art Unit: 3681

patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1, 83, 89, 90, 96, 100, 102, 104, 140, 141, and 147-153 are rejected under 35

U.S.C. 102(b) as being anticipated by Rattunde et al (US 5,045,028).

Rattunde et al teach a contact pressure system for a continuously variable transmission comprising a torque sensor (102) having an input side (106) and an output side (109), rotatable disks (i.e., pulleys), a transmission unit (101, 108, and the internal teeth of ring 106), a spring system (115), linear ramps (103, 104), means (115, 105) for controlling by which of the ramps a torque is transmitted, a torque transmitting component/body (105) supported on ramps (103, 104), and an endless torque-transmitting means (i.e., the belt).

12. Claims 1, 83, 90, 96, 101, 104, 140, 141, and 147-153 are rejected under 35

U.S.C. 102(e) as being anticipated by Ehrlich et al (US 6,336,878).

Ehrlich et al teach a contact pressure system for a continuously variable transmission comprising a torque sensor (52, 54, 56) having an input side (52) and an output side (56), rotatable disks (i.e., pulleys), a transmission unit (48, 50, and the internal teeth of disk 52), nonlinear ramps (i.e., ramps that balls 54 are supported), a torque transmitting component/body (54) supported on ramps, and an endless torque-transmitting means (16).

### ***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3681

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 91-93 and 99 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehrlich et al (US 6,336,878) in view of Sawada et al (US 6,007,452).

Ehrlich et al do not specify the transmission unit, which includes a sun, ring, planet gears and a gear carrier. Sawada et al show a continuously variable transmission including a planetary transmission (17) disposed between the engine (10) and the drive pulley (16). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the transmission unit of Ehrlich et al to have a planetary transmission as taught by Sawada et al in order to provide the system having forward and reverse features.

15. Claims 95 and 98 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehrlich et al (US 6,336,878) in view of Sawada et al (US 6,007,452), as applied to claim 91 above, and further in view of Katori (US 4,788,891).

The modified system of Ehrlich et al and Sawada et al does not show the sun gear and the planet gear being elliptical. Katori shows a planetary gear unit, which has an elliptical sun gear and elliptical planet gear (see Figs 6 and 8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the transmission unit of the combination of Ehrlich et al and Sawada et al to have the sun gear and the planet gear being elliptical as taught by Katori in order to improve the acceleration characteristics of the output shaft (col. 3, lines 48-57).

Art Unit: 3681

16. Claim 97 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ehrlich et al (US 6,336,878) in view of Katori (US 4,788,891).

Ehrlich et al do not show the transmission unit having at least one gear being elliptical. Katori shows a planetary gear unit, which has an elliptical sun gear and elliptical planet gear (see Figs 6 and 8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the transmission unit of Ehrlich et al to have a gear being elliptical as taught by Katori in order to improve the acceleration characteristics of the output shaft (col. 3, lines 48-57).

***Allowable Subject Matter***

17. Claims 84-88, 94, 103, 105-114, 119, 120, 127, 128, 132-134, 143, 145 and 146 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

18. Claims 116, 135, 136, 138 and 139 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Communication***

19. Submission of your response by facsimile transmission is encouraged. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 for regular communications and (703) 872-9327 for After Final communications. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see M.P.E.P. 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission



Art Unit: 3681

separately from the check. Responses submitted by facsimile transmission should include a Certificate of Transmission (M.P.E.P. 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to  
the Patent and Trademark Office on \_\_\_\_\_  
(Date)

Typed or printed name of person signing this certificate:

\_\_\_\_\_  
(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and M.P.E.P. 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Examiner Ho whose telephone number is (703) 305-0738. The examiner can normally be reached on Monday-Friday from 7:30 A.M. to 5:00 P.M. Eastern Standard Time. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Mr. Charles Marmor, can be reached at (703) 308-0830. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168.

*Ha Ho 9/10/03*

Ha Ho  
Patent Examiner  
Art Unit 3681